



## Router Configuration Note

# Linksys Wireless G WRT54GS

## Version 1.0

### Scope


This document describes how to configure the Linksys Wireless G WRT54GS router to work with LucidLink™ Wireless Security Software, version 1.5. The document:

- Focuses on the manual configuration of the router.
- **Does not** address LucidLink software installation or configuration.
- Assumes the LucidLink server is installed and configured with an IP address and shared secret.

### Requirements

This document will work with routers that meet the following requirements:

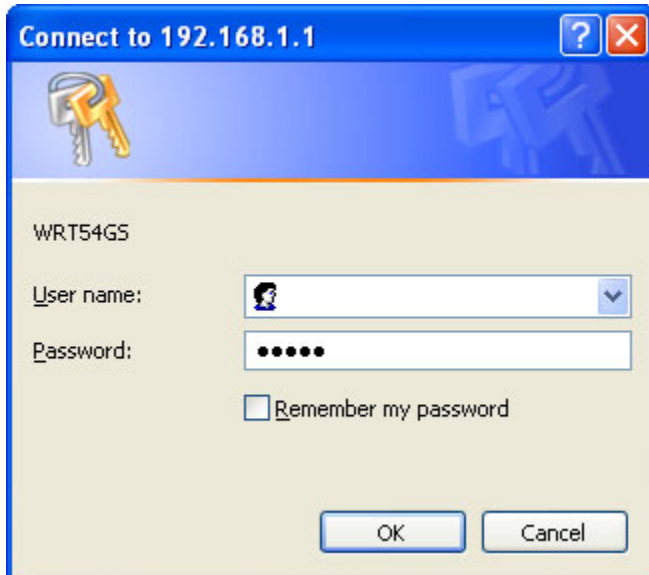
<b>Product Model Number</b>	WRT54GS
<b>Firmware Version</b>	V2.07.1, Feb 26, 2004
<b>NICs</b>	

	The exact configuration of the router depends on the combination of router, wireless adapter card, and client operating system used. For a list of compatible and supported hardware combinations, go to: <a href="http://www.lucidlink.com/Tech_Support/Compatibility.asp">www.lucidlink.com/Tech_Support/Compatibility.asp</a>
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## Connecting to the Router

- 1 Connect the Router to the same network hub as the workstation you will use to configure it. This workstation does not necessarily have to be the LucidLink server host computer.
  - Connect the Ethernet Cable to the **Ethernet** connector port.
  - Connect the power pack output to the power port.
  - Reset to factory default with reset button in back.
- 3 Open an Internet browser and enter the default IP address **192.168.1.1** in the address field.
- 4 At the login box, enter **User Name** and **Password**.

Linksys factory defaults are **blank** for User Name and **admin** for Password.



5 Click **OK**

The *Setup* screen is displayed:

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A Division of Cisco Systems, Inc. Firmware Version: v2.07.1

**Wireless-G Broadband Router with SpeedBooster WRT54GS**

**Setup** | Wireless | Security | Access Restrictions | Applications & Gaming | Administration | Status

Basic Setup | DNS | MAC Address Clone | Advanced Routing

**Internet Setup**

Internet Connection Type: Automatic Configuration - DHCP

Optional Settings (required by some ISPs)

Router Name: WRT54GS

Host Name:

Domain Name:

MTU: Auto

Size: 1500

**Network Setup**

Router IP

Local IP Address: 192.168.1.1

Subnet Mask: 255.255.255.0

DHCP Server: ☒ Enable ☐ Disable

Starting IP Address: 192.168.1.100

Maximum Number of DHCP Users: 50

Client Lease Time: 0 minutes (0 means one day)

**Automatic Configuration - DHCP:** This setting is most commonly used by Cable operators.

**Host Name:** Enter the host name provided by your ISP.

**Domain Name:** Enter the domain name provided by your ISP.

**More...**

**Local IP Address:** This is the address of the router.

**Subnet Mask:** This is the subnet mask of the router.

**DHCP Server:** Allows the router to manage your IP addresses.

**Starting IP Address:** The address you would like to start with.

**Maximum number of DHCP Users:** You may limit the

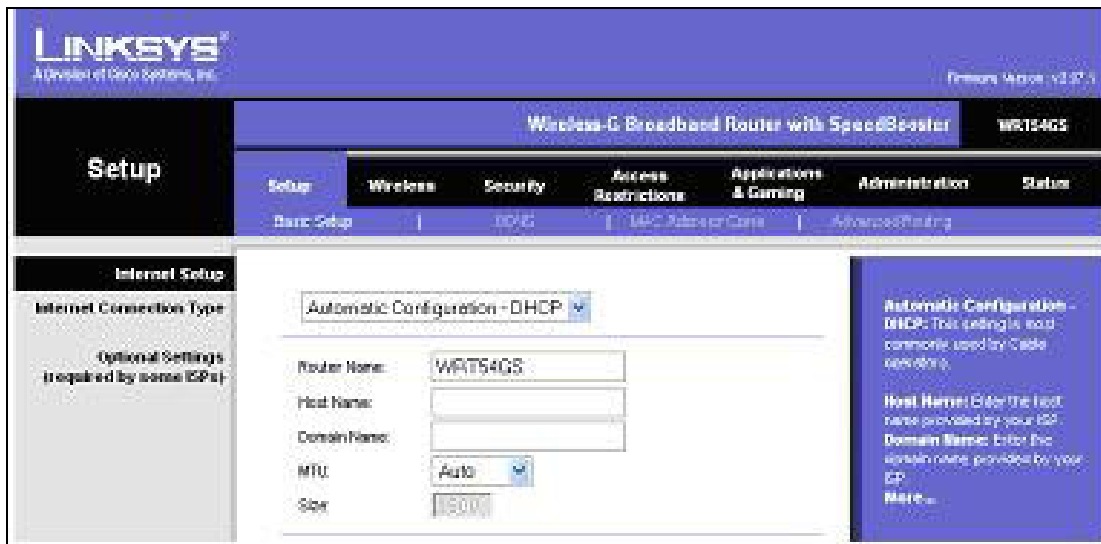
# Configuring the Router

Once you've connected to the router, follow these steps to configure it to work with LucidLink software.

## IP Addresses

- 1 Click **Setup** from the top navigation bar.

*Internet Setup* section of screen is displayed.



- 2 In **Internet Connection Type**, choose from list based on information from your ISP.
- 3 In the *Router IP* section, enter:
  - **Local IP Address**— IP address for Router
  - **Subnet Mask** — Portion of your internal wired LAN shared by the router and the LucidLink Server computer.
- 4 In *Network Address Server Settings (DHCP)* section, enter:
  - **DHCP** — Enable
  - **Starting IP Address** — 100.
  - **Number of DHCP Users** — 50
- 5 In *Time Settings* section:
  - Choose the appropriate **Time Zone** for the router.
  - Select *Daylight Saving* settings if appropriate.

Leave defaults for rest of page.

The screenshot shows the 'Network Setup' page for a Linksys WRT54GS router. The left sidebar has three sections: 'Router IP', 'Network Address Server Settings (DHCP)', and 'Time Setting'. The main content area is divided into three sections: 'Router IP', 'DHCP Server', and 'Time Setting'. The 'Router IP' section shows 'Local IP Address' as 192.168.1.1 and 'Subnet Mask' as 255.255.255.0. The 'DHCP Server' section shows 'DHCP Server' as 'Enable', 'Starting IP Address' as 192.168.1.100, 'Maximum Number of DHCP Users' as 50, 'Client Lease Time' as 0 minutes, and 'Static DNS' fields for DNS 1, 2, 3, and WINS, all set to 0. The 'Time Setting' section shows 'Time Zone' as '(GMT-05:00) Eastern Time (USA & Canada)' and a checked box for 'Automatically adjust clock for daylight saving changes'. On the right side, there is a blue sidebar with explanatory text for 'Local IP Address', 'Subnet Mask', 'DHCP Server', 'Starting IP Address', 'Maximum number of DHCP users', and 'Time Setting'. At the bottom, there are 'Save Settings' and 'Cancel Changes' buttons, and a 'Cisco Systems' logo.

**Network Setup**

**Router IP**

Local IP Address: 192 . 168 . 1 . 1

Subnet Mask: 255 . 255 . 255 . 0

**Network Address Server Settings (DHCP)**

DHCP Server: ☒ Enable ☐ Disable

Starting IP Address: 192.168.1.100

Maximum Number of DHCP Users: 50

Client Lease Time: 0 minutes (0 means one day)

Static DNS 1: 0 . 0 . 0 . 0

Static DNS 2: 0 . 0 . 0 . 0

Static DNS 3: 0 . 0 . 0 . 0

WINS: 0 . 0 . 0 . 0

**Time Setting**

Time Zone: (GMT-05:00) Eastern Time (USA & Canada)

☒ Automatically adjust clock for daylight saving changes

**Local IP Address:** This is the address of the router.

**Subnet Mask:** This is the subnet mask of the router.

**DHCP Server:** Allows the router to manage your IP addresses.

**Starting IP Address:** The address you would like to start with.

**Maximum number of DHCP users:** You may limit the number of addresses your router hands out.

**More...**

**Time Setting:** You may set the time manually. Or choose Automatically if you wish to use a NTP server to keep the most accurate time. Choose the time zone you are in. This router can also adjust automatically for daylight savings time.

**Save Settings** **Cancel Changes**

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6 Click **Save Settings**.

7 Click **Continue**

## SSID and Channel

The SSID (Network Name) is used by the wireless clients to identify your network. The SSID appears to users when they connect to the network. You can use the same or different SSIDs for each router. The default SSID should be changed, as this is an un-secure SSID and can be a potential security threat to your network.

- 1 Click the **Wireless** tab.

The *Wireless Settings* screen is displayed.

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A Division of Cisco Systems, Inc. Firmware Version: v2.07.1

**Wireless-G Broadband Router with SpeedBooster** TS-WRT54GS

**Wireless** | Setup | **Wireless** | Security | Access Restrictions | Applications & Gaming | Administration | Status

Basic Wireless Settings | Wireless Security | Wireless MAC Filter | Advanced Wireless Settings

**Wireless Network**

Wireless Network Mode: Mixed

Wireless Network Name (SSID): linksys

Wireless Channel: 6 - 2.437GHz

Wireless SSID Broadcast: ☒ Enable ☐ Disable

**Wireless Network Mode:**  
SpeedBooster is enabled automatically on **Mixed** Mode and **G-Only** mode. If you wish to exclude Wireless-G clients, choose **B-Only** Mode. If you would like to disable wireless access, choose **Disable**. [More...](#)

**Save Settings** **Cancel Changes**

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- 2 In **Wireless Network Mode** choose **Mixed**.
- 3 In **Wireless Network Name (SSID)** enter the SSID for this router.
- 4 In **Wireless Channel** leave default.
- 5 In **Wireless SSID Broadcast** select **Enable**.
- 6 Click **Save Settings**.
- 7 Click **Continue**.

## Security

Routers can be configured for *Maximum Security* (WPA-RADIUS with TKIP), or *Maximum Compatibility* (68/128-bit dynamic WEP key encryption), depending on the capabilities of the client wireless adapter cards. To learn your hardware capabilities, see the Compatibility Chart at.

[www.lucidlink.com/Tech\\_Support/Compatibility.asp](http://www.lucidlink.com/Tech_Support/Compatibility.asp)

- 1 Click **Wireless Security** from the navigation bar on the Wireless tab.

The *Wireless Security* screen is displayed.

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**Wireless-G Broadband Router with SpeedBooster** TS-WRT54GS

**Wireless** | Setup | **Wireless** | Security | Access Restrictions | Applications & Gaming | Administration | Status

Basic Wireless Settings | **Wireless Security** | Wireless MAC Filter | Advanced Wireless Settings

**Wireless Security**

Security Mode:

WPA Algorithms:

RADIUS Server Address:  .  .  .

RADIUS Port:

Shared Key:

Key Renewal Timeout:  seconds

**Security Mode:** You may choose from Disable, WEP, Pre-Shared Key, PSK RADIUS, or RADIUS. All devices on your network must use the same security mode in order to communicate. [More...](#)

**Save Settings** **Cancel Changes**

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- 2 Enter:
  - **Security Mode – PSK-Radius.** (The Security Mode list is miss-labeled. The entry for PSK-Radius is actually WPA-Radius.)
  - **WPA Algorithm –TKIP**
  - **RADIUS Server Address** – LucidLink server IP address.
  - **RADIUS Port– 1812**
  - **Secret Key**– Shared Secret configured on LucidLink server *Settings* dialog. The Shared Secret is autogenerated when you install the server. Copy this value from the Management Console *Settings* dialog to the router's interface page.
  - **Left Key Renewal Timeout**– leave default.

- 3 Click **Save Settings**.
- 4 Click **Continue**.

## Change Administrator Password

To secure your router, we recommend that you change the default administrator password

- 1 Click the **Administration** tab.
- 2 Enter the new **Password** and re-enter it to confirm it.
- 3 Click **Save Settings**.
- 4 Click **Continue**.

## Rechecking Connection

- 1 Reopen your browser and enter the router's **IP address** in the Address field.
- 2 At the Login, enter the new router **User Name** and **Password**.  
You should once again see the *Home* screen.
- 2 You may optionally bookmark this URL or create a shortcut to it from your desktop for future access to the Linksys Wireless G WRT54GS configuration screens.

## Installing Router

Connect the router to the same network hub or switch as the LucidLink server computer, if it is not already there.